



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TUBERCULOSIS SANATORIUM, FORT STANTON, N. MEX.

A REPORT FOR THE YEAR ENDED JUNE 30, 1914, OF THE SANATORIUM MAINTAINED BY THE PUBLIC HEALTH SERVICE FOR THE TREATMENT OF TUBERCULOUS PATIENTS.

By F. C. SMITH, Passed Assistant Surgeon, United States Public Health Service.

General Information.

| | |
|--|---------|
| Number of patients present July 1, 1913..... | 146 |
| Number of patients admitted during the year..... | 182 |
| Total number treated during year..... | 328 |
| Number of patients discharged during the year..... | 142 |
| Number of deaths (included in preceding item)..... | 56 |
| Number of bodies interred in sanatorium cemetery..... | 55 |
| Number of patients present June 30, 1914..... | 186 |
| Minimum number of patients during the year (July 3, 1913)..... | 144 |
| Maximum number of patients during the year (Mar. 13, 1914)..... | 213 |
| Total days' treatment furnished patients..... | 67, 760 |
| Number of officers and attendants..... | 90 |
| Number of patients who left against advice..... | 25 |
| Number of patients readmitted..... | 17 |
| Number of patients discharged for causes affecting discipline..... | 5 |
| Number of patients transferred to other stations, 1 dyspnea, 1 asthma..... | 2 |
| Number of physical examinations during year..... | 1, 057 |
| Average duration of stay of patients discharged, 10 months 25 days. | |
| Minimum stay, 1 day. | |
| Maximum stay, 8 years and 9 days. | |

Patients discharged during the year, with stage of disease and result of treatment.

| | Appar- ently cured. | Arrested. | Im- proved. | Not im- proved. | Died. | Total. |
|--------------------------|---------------------------|-----------|----------------|--------------------|-------|--------|
| Incipient..... | 9 | 6 | 1 | 1 | 1 | 18 |
| Moderately advanced..... | 1 | 10 | 6 | 3 | 3 | 23 |
| Far advanced..... | 1 | 12 | 15 | 19 | 52 | 99 |
| Nontuberculous..... | | | | | | 2 |
| Total..... | 11 | 28 | 22 | 23 | 56 | 142 |

Period of prevention of the 56 who died, included in the above summary.

| | |
|------------------------------|----|
| Over 2 years..... | 8 |
| Between 1 and 2 years..... | 9 |
| Between 6 and 12 months..... | 7 |
| Between 3 and 6 months..... | 8 |
| Between 1 and 3 months..... | 15 |
| Under 1 month..... | 9 |

Prognosis on arrival.

| | |
|---|----|
| Favorable..... | 33 |
| Favorable for arrest..... | 42 |
| Favorable for prolongation of life by living under proper conditions..... | 13 |
| Unfavorable..... | 51 |
| Doubtful..... | 2 |
| Nontuberculous..... | 1 |

As in previous years more than two-thirds of the cases treated are far advanced and only a few incipient. The large number of deaths is due in part to the policy of encouraging those hopelessly sick to remain.

Cause of Death.

Fifty-six patients died during the year. Thirty-two autopsies were held. The causes of death were as follows:

| | | |
|--|---|----|
| Tuberculosis of lungs, uncomplicated except by the usual terminal degenerative changes of viscera..... | 1 | 35 |
| Tuberculosis of lungs and pulmonary hemorrhage: | | |
| Sudden death..... | 1 | |
| Broncho-pneumonia..... | 1 | |
| Dilatation of heart..... | 2 | |
| | — | 4 |
| Tuberculosis of lungs and intestines..... | 2 | 2 |
| Tuberculosis of lungs and meninges..... | 3 | 3 |
| Tuberculosis of lungs and larynx..... | | 5 |
| Tuberculosis of lungs with nephritis..... | 4 | 3 |
| Tuberculosis of lungs and acute dilatation of heart..... | 5 | 2 |
| Tuberculosis of lungs and carcinoma of stomach with metastasis..... | | 1 |
| Tuberculosis of lungs and exposure to cold while drunk..... | 6 | 1 |

Dental Work.

A dentist has been on duty for about four months and gave valuable assistance. Among other items of institutional work rendered without charge to patients were 273 fillings, 100 extractions, and 142 other treatments for various dental ailments. The dentist's position carries no salary and it is difficult to keep the place filled.

Treatment.

The usual sanatorium regimen has been observed, the most important item of which is the regulation of rest and exercise. An unusually large number of bedfast cases has been present, the daily average for the year being 34. This has taxed the capacity of the infirmary building and the efforts of the infirmary personnel.

Amusements.

Patients and attendants through their amusement association have continued to operate a weekly moving-picture show of four films. The baseball team is financed by the same organization. All entertainments are free to patients and are without expense to the Government. A successful Fourth of July picnic and barbecue, in which several hundred people from the neighboring ranches participated with the patients, was arranged by the same organization.

¹ One died suddenly, syncope, immediate cause of death undetermined.

² One died of hemorrhage from bowels.

³ One was being treated by induced pneumothorax.

⁴ One fatty degeneration of kidneys; tuberculosis healed.

⁵ One attributed to treatment by induced pneumothorax; one resulted from chronic myocarditis.

⁶ Tuberculosis healed.

Statement of receipts and expenditures of marine-hospital amusement association for the fiscal year 1913-14.¹

| RECEIPTS. | | DISBURSEMENTS. | |
|---|----------------|------------------------------|----------------|
| Balance brought forward..... | \$156.57 | Film rental..... | \$390.00 |
| Donations..... | 779.00 | Improvements..... | 107.03 |
| Grand-stand receipts..... | 73.90 | Express..... | 189.09 |
| Sale of calendars, sacks, egg cases, barrels, etc..... | 131.18 | Baseball..... | 247.30 |
| Receipts from picnic stands..... | 443.95 | Repairs..... | 22.38 |
| | | Postage..... | 4.72 |
| | | Miscellaneous..... | 48.80 |
| | | Telegrams..... | 3.25 |
| | | Picnic..... | 380.87 |
| | | Balance carried forward..... | 193.16 |
| | <hr/> 1,584.60 | | <hr/> 1,584.60 |

Library.

During the year 163 bound volumes were added to the library, which now contains 3,082 books and receives, without expense to the Government, 60 periodicals and 2 daily papers. Books and periodicals were drawn to the number of 13,185, of which 11,357 were for patients.

Religious Services.

Nonsectarian services were held each Sunday by the chaplain who also conducted religious exercises at each interment in the sanatorium cemetery.

Graduated Exercise and Patients' Earnings.

Selected cases after at least two months' observation are given therapeutic exercise, usually in one-hour daily periods.

| | |
|--|-------|
| Total number of patients working on exercise squads..... | 87 |
| Total hours of work, exercise..... | 4,886 |

The principal items included in the above are:

| | Hours. |
|--|--------|
| Passing wood to power saw..... | 1,320 |
| Hauling stove wood with horse and wagon..... | 792 |
| Garden work..... | 156 |
| Carrying trays in hospital..... | 364 |
| Cleaning in hospital wards..... | 294 |
| Preparing vegetables, splitting kindling, painting, cleaning grounds, etc..... | 1,960 |

Prescribed exercise may be taken in walking if the patient chooses, but none declining work with the exercise squads is eligible for positions carrying remuneration. Remunerative positions are obtainable to all approaching fitness for discharge. Sixty-one patients worked for 30 days or more as attendants. The amount earned by patients on the pay roll as attendants was \$8,392.67. Many are employed after recovery and the amount earned by ex-patients on the pay roll was \$3,253.83. Private enterprise is encouraged and 82 earned money in this way.

¹ Prepared by C. U. Babbs, Secretary.

All ambulatory patients live in tent houses, of which there are 90, each usually occupied by two patients who are required to keep their quarters clean and make their own beds. This work, which is exacted in addition to all other exercise prescribed, is therefore the minimum required from all patients whose physical condition admits their discharge from the infirmary building.

Earnings by private enterprise.

| Occupation. | Number of patients employed during year. | Aggregate of hours. | Approximate amount earned. |
|--|--|---------------------|----------------------------|
| Clerk in store..... | 3 | 2,548 | \$360 |
| Clerk in post office..... | 2 | 1,458 | 120 |
| Shoemaker..... | 5 | 936 | 180 |
| Barber..... | 2 | 1,872 | 420 |
| Hostler..... | 4 | 1,040 | 120 |
| Cook..... | 1 | 240 | 75 |
| Waiter and scullion..... | 11 | 4,576 | 480 |
| Other domestics (strikers)..... | 40 | 10,395 | 1,650 |
| Miscellaneous employment, including photography, cleaning clothes, polishing shoes, attending pool table, trapping, etc..... | 14 | 5,040 | 1,102 |
| Total..... | 82 | 23,109 | 3,907 |

In all, \$15,553.50 were earned during the year at the institution by patients or ex-patients. The benefit of work both paid and unpaid at this isolated institution can hardly be overestimated. The long average duration of treatment attained is largely attributable to the opportunities provided for employment, but no great saving is effected for the institution.

Passed Asst. Surg. F. H. McKeon, who has charge of all ambulatory patients, regulates their activities, the benefit of which always depends on careful observation of clinical symptoms.

Water Supply.

All water for domestic purposes has been pumped from the station wells during the year. This water is not satisfactory for domestic purposes on account of its hardness. Pumping is expensive with our present equipment and there is danger that the station will become confirmed in unwise habits of economy in the use of water. Water rights are still in litigation and it has become necessary for the station to prove its claims to all water used for domestic and other purposes. The uncertainty of the outcome is delaying decision concerning new construction and major repairs.

Cost of Maintenance.

A total of \$122,828.18 was spent. The gross cost of each day's treatment per patient was \$1.7774 and the net cost \$1.7348. The cost of the daily ration purchased was \$0.3357. Including station products at market prices the cost of the daily ration was \$0.6890.

Items of expenditure.¹

| | Per annum. | Per patient per day. |
|--|-------------------|-------------------------|
| Salaries only: | | |
| Medical officers..... | \$8,340.22 | \$0.1216 |
| Pharmacists and office force..... | 3,578.30 | .0528 |
| Power plant..... | 2,806.67 | .0414 |
| Carpenters, plumbers, and painters..... | 2,834.00 | .0418 |
| Nursing..... | 3,405.00 | .0520 |
| Cooks and waiters..... | 6,014.33 | .0886 |
| Laundry..... | 1,320.00 | .0195 |
| Range herd..... | 2,820.00 | .0415 |
| Dairy..... | 2,013.67 | .0297 |
| General..... | 2,401.33 | .0354 |
| Farm..... | 5,733.00 | .0854 |
| Total..... | 41,219.52 | .6097 |
| Material and supplies: | | |
| Subsistence supplies..... | 33,343.22 | .4921 |
| Dispensary..... | 737.59 | .0109 |
| Kitchen..... | 1,047.47 | .0154 |
| Fuel (wood furnished to tents, quarters, etc., and gasoline for operating wood saw)..... | 5,976.17 | .0881 |
| Laundry..... | 573.74 | .0085 |
| Miscellaneous..... | 2,193.67 | .0324 |
| Power plant (coal and miscellaneous supplies)..... | 12,650.73 | .1867 |
| Dairy..... | 254.27 | .0037 |
| Range (including gasoline for well-drilling operations)..... | 3,544.09 | .0523 |
| Forage..... | 11,642.44 | .1718 |
| Farm..... | 1,107.87 | .0163 |
| Repairs and preservation of public buildings..... | 4,855.79 | .0716 |
| Mechanical equipment for public buildings..... | 1,216.16 | .0179 |
| Salaries..... | 41,219.52 | .6037 |
| Total expenditures..... | 122,828.18 | 1.7774 |
| Refund from reimbursement from officers and attendants for subsistence supplies..... | \$1,403.80 | |
| Realized from sale of beef hides..... | 1,472.14 | |
| Realized from sale of excess dairy calves..... | 3.10 | |
| | 2,884.04 | .0426 |
| Net expenditures..... | 119,944.14 | 1.7348 |

¹ Prepared by H. D. Leech, pharmacist.

NOTE.—Salaries of consulting engineer and hydrographer on water investigation not included in above.

The cost of repairs all of which are made by the station force, was considerable, owing to the large number of buildings—32, all of which are old.

Over 4,000 gallons of soft soap were made from waste grease and a saving of \$286.77 effected over the average cost of soap in previous years. Sawdust and other rubbish were burned at the power plant during the month of June, the supply of coal being exhausted.

The large number of bed-fast patients increases our cost of maintenance. The cost of nursing a daily average of 34 infirm patients was \$3,497.70 for the year, or \$0.2293 per capita per day against \$423.75 and \$0.0079, respectively, for nursing 151 ambulant patients. The cost of laundry for the infirm patients was \$0.0422 per day against \$0.0251 for the others. The cost of burying 55 bodies, counting labor and material was \$435.90.

A list of 53 representative sanatoria and their respective costs of maintenance was published in last year's annual report from this institution. Reprint No. 145 from the Public Health Reports.

Farm and Herd.

All the beef and milk used were produced on the station.

The prices fixed for these articles—15 cents a pound and 35 cents a gallon, respectively—are probably too low, considering the fact that the beef is chiefly from corn-fed steers hung in storage from four to six weeks and the milk is bottled and from a tuberculin-tested purebred Jersey herd. The contract price, quoted for eggs, is also less than the station-produced eggs are worth.

The threatened famine on the range, mentioned in last year's report, necessitated the pasturing of 1,000 cattle, approximately one-half the herd, on the Mescalero Indian Reservation at the usual grazing rates charged by the Indian Service. A permanent camp was established there with two attendants in charge and though the expense of maintaining the range herd was materially increased, the losses from starvation were less than in previous years.

About $2\frac{1}{2}$ miles of new fence were built, adding several hundred acres of grazing land to the range. As heretofore, the farm force has assisted in many emergencies incident to sanatorium management. The farm account shows a considerable profit to the institution for the year.

Statement of farm account.

| DR. | CR. |
|--|---|
| Salaries and rations, including expert farmer, farm hands, dairymen, and fence riders..... | Beef, 108,658 pounds, at 15 cents per pound (market price)..... |
| \$13,277.78 | \$16,013.70 |
| Repair materials, farm machinery, dairy equipment, and range material..... | Pork, 4,633 pounds, at 15 cents per pound (contract price)..... |
| 2,226.23 | 604.95 |
| One Jersey bull..... | Eggs, 1,697 dozen, at 26 cents per dozen (contract price)..... |
| 125.00 | 441.22 |
| Eighteen range bulls..... | Milk, 38,983 gallons, at 35 cents per gallon (market price)..... |
| 2,555.00 | 13,644.05 |
| Forage purchased..... | Green corn, 2,083 pounds, at 4.32 cents per pound..... |
| 11,642.44 | 90.00 |
| Profit..... | Lettuce, 722 pounds, at 12 cents per pound (contract price)..... |
| 6,780.87 | 86.64 |
| | Onions, 10,484 pounds, at 5 cents per pound (contract price)..... |
| | 524.20 |
| | Apples, 4,306 pounds, at 1.59 cents per pound (contract price)..... |
| | 68.47 |
| | Other vegetables, 6,887 pounds, at 5 cents per pound..... |
| | 344.35 |
| | Excess Jersey calves sold..... |
| | 3.10 |
| | Beef hides sold..... |
| | 1,472.14 |
| | Alfalfa, 177.5 tons, at \$13 per ton (contract price)..... |
| | 2,307.50 |
| | Ensilage, 60 tons, at \$5 per ton (arbitrary price)..... |
| | 300.00 |
| | Labor loaned sanatorium..... |
| | 617.00 |
| 36,607.32 | 36,607.32 |

NOTE.—Alfalfa and ensilage, while given as a farm credit, were consumed in the production of milk and beef.